STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street, Baltimore, Maryland 21201

Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – John M. Colmers, Secretary

Office of Preparedness & Response
Isaac P. Ajit, M.D., M.P.H., Acting Deputy Director

September 21, 2007
Public Health & Emergency Preparedness Bulletin: # 2007:37
Reporting for the week ending 09/15/07 (MMWR Week #37)

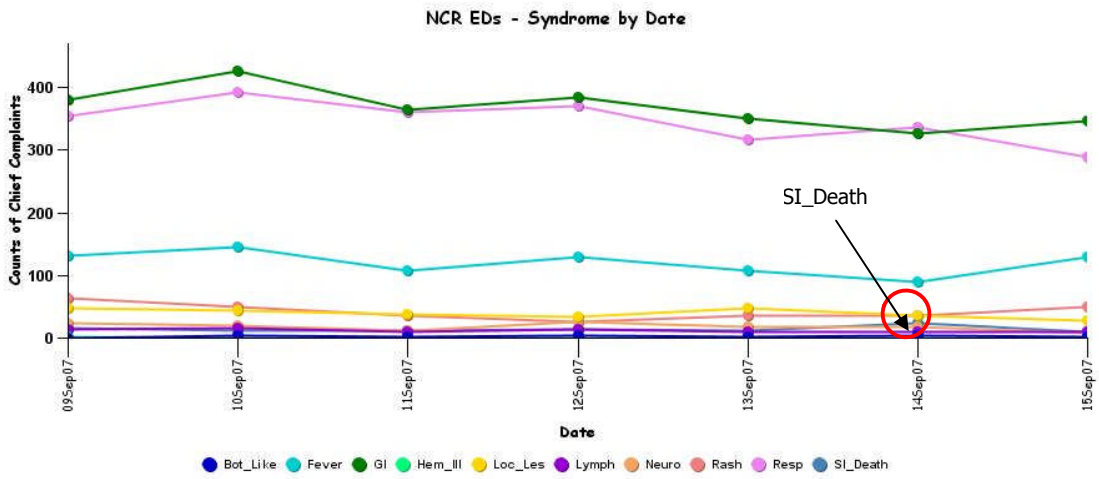
CURRENT HOMELAND SECURITY THREAT LEVELS

National: **Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)**
Maryland: **Yellow (ELEVATED)**

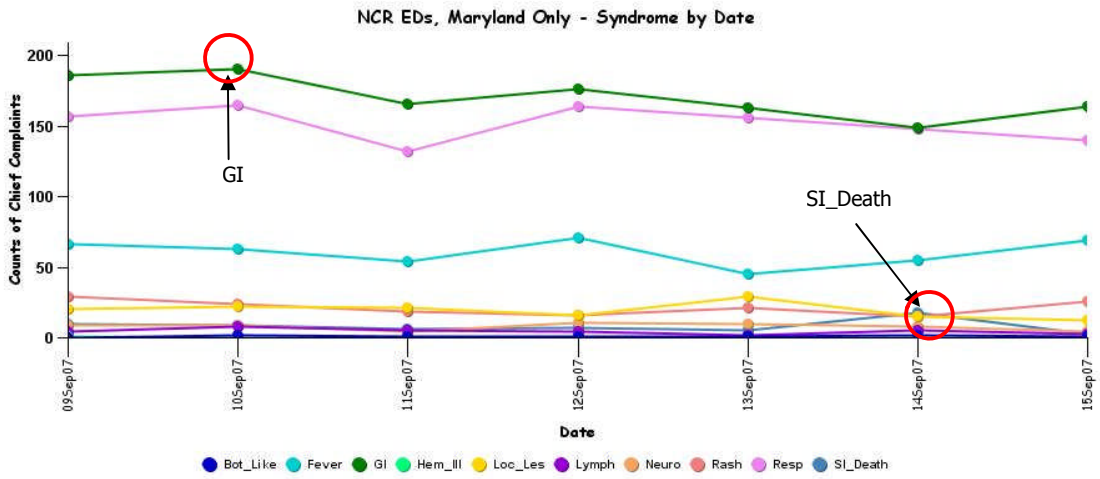
SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts only. Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

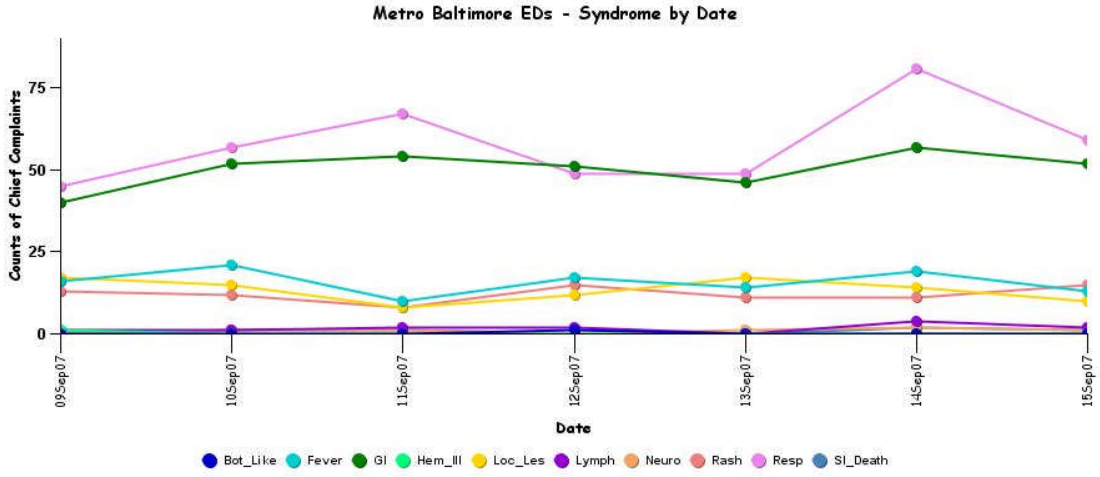
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.



* Includes EDs in all jurisdictions in the NCR (MD, VA, DC) under surveillance in the ESSENCE system

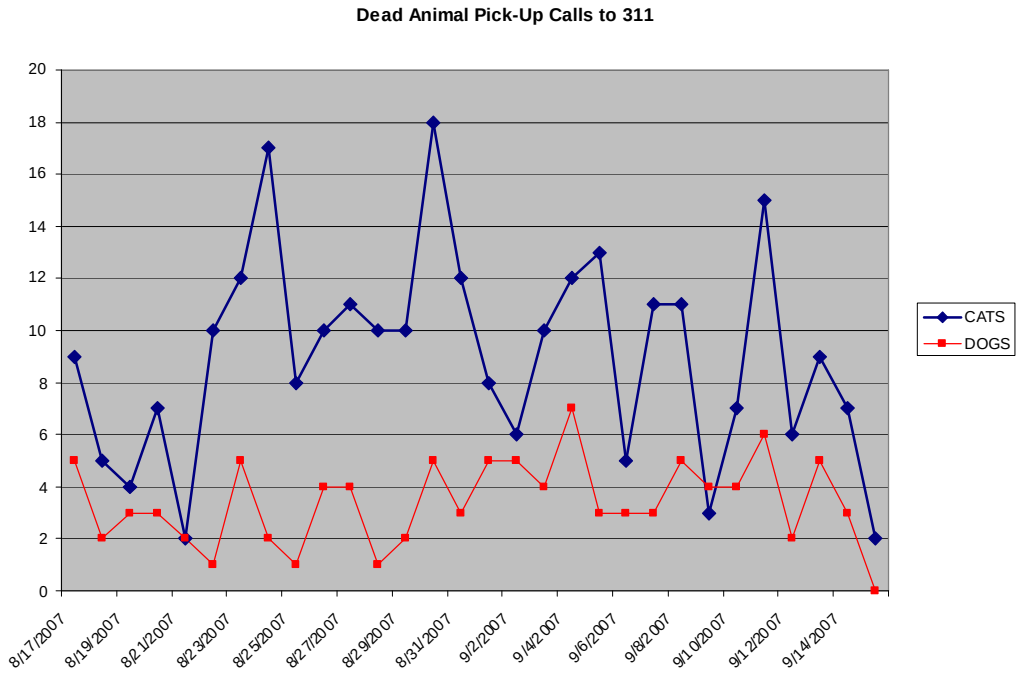


* Includes only Maryland EDs in the NCR (Prince George's and Montgomery Counties) under surveillance in the ESSENCE system



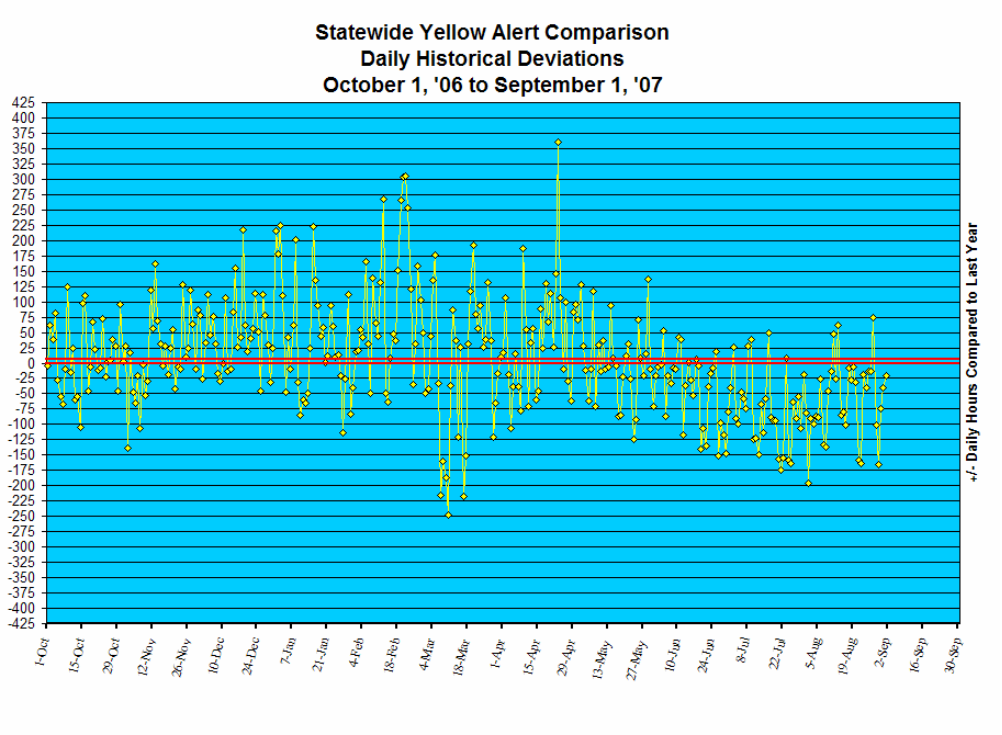
* Includes EDs in the Metro Baltimore region (Baltimore City and Baltimore County) under surveillance in the ESSENCE system.

BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT: No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.



REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/06.



REVIEW OF MORTALITY REPORTS

OCME: OCME reports no suspicious deaths related to BT for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in August 2007 did not identify any cases of possible terrorism events.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases:	21	-
Prior week:	17	1
Week#37, 2006:	19	1

OUTBREAKS: 2 outbreaks were reported to DHMH during MMWR Week 37 (Sep. 9- Sep. 15, 2007):

1 Gastroenteritis outbreak
1 outbreak of GASTROENTERITIS associated with a Nursing Home

1 Rash illness outbreak
1 outbreak of CHICKENPOX associated with a School

MARYLAND SEASONAL FLU STATUS:

Seasonal Influenza reporting occurs October through May. No cases of influenza were reported to DHMH during MMWR Week 37 (September 9 - 15, 2007).

***Please note:** Influenza data reported to DHMH through the National Electronic Disease Surveillance System (NEDSS) is provisional and subject to further review.

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO Pandemic Influenza Phase: Phase 3/4: No or very little human-to-human transmission/Small clusters with limited human-to-human transmission, suggesting that the virus is not well adapted to humans

US Pandemic Influenza Stage: Stage 0/1: New domestic animal outbreak in at-risk country/Suspected human outbreak overseas

*More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at: http://bioterrorism.dhmh.state.md.us/flu.htm

WHO update: As of September 10, 2007, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 328, of which 200 have been fatal. Thus, the case fatality rate for human H5N1 is about 61%.

AVIAN INFLUENZA, HUMAN (Indonesia): 10 Sep 2007, The Ministry of Health of Indonesia has announced a new case of human infection of H5N1 avian influenza. A 33-year-old male from Riau Province developed symptoms on Aug 25, was hospitalized on Sep 2 and died in hospital on Sep 6. His source of exposure is currently under investigation. Of the 106 cases confirmed to date in Indonesia, 85 have been fatal.

NATIONAL DISEASE REPORTS:

PLAGUE, HUMAN (Arizona): 14 Sep 2007, Arizona's first case of plague since 2000 has been reported in an adult female in Apache County. The woman became ill early September from a flea bite at her home in northern Arizona. She is now recovering after receiving the appropriate antimicrobial treatment. In a community northeast of Flagstaff in Coconino County, an outbreak of plague involving prairie dogs is occurring. Many rodents are dying from the disease and are leaving behind infected fleas. County health and Northern Arizona University officials are closely monitoring and responding to this situation. Response has included flea collecting and testing, and extensive prevention education and outreach to people in affected areas. During the last 30 years, 48 cases of plague have been reported in Arizona, 8 of which were fatal. The plague risk has been relatively low during the last 6 years due to drought conditions and high summer temperatures. (Plague is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

PLAGUE, FELINE (New Mexico): 14 Sep 2007, A Ruidoso, NM case of feline plague was reported this week by Dr. Amanda Favis, a veterinarian with the Ruidoso Animal Clinic. On Sep 6, a cat was admitted to the clinic on Sudderth Drive with a 1-week history of depression and a decreased appetite, she said. Examination revealed that the animal was running a high fever and showed an enlarged lymph node in the neck. The attending veterinarian obtained fluid from the enlarged lymph node and sent a sample to the New Mexico State Veterinary Diagnostic Laboratory, Favis said. Test results were positive for plague. The cat was started on the appropriate antibiotics and is recovering well from her illness. "It is important for all animal owners in New Mexico to be aware of the risk of plague in our environment and the possibility of infection in household pets," Favis said. "Plague is a bacterium most commonly infecting rodents and rabbits, and is spread primarily by infected fleas. Cats can be infected with plague by eating an infected animal, being bitten by an infected flea, or by inhaling the bacteria. "Cats typically will develop signs of illness within one to 6 days, Favis said. Signs of plague in a cat include lack of appetite, fever, depression, swelling in the neck region, draining abscesses, difficulty breathing, and coughing. Plague season in New Mexico includes spring, summer, and early autumn, when above-freezing temperatures allow the flea population to thrive, she said. "The best way to protect your cat during this period is to utilize flea control," the veterinarian said. "Plague can be transmitted to humans by infected pets and the bite of an infected flea."Pets can transmit the bacteria to humans through human contact with infected fluids or tissue, such as ruptured abscess and bite wounds, handling of sick or dead infected animals, and, in pneumonic plague, via respiratory secretions, although this is very rare and has never happened in New Mexico." If plague is suspected in any animal, immediate veterinary care should be sought to achieve a diagnosis and receive treatment, Favis said. (Plague is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

PET FOOD ALERT (Multi-State): 14 Sep 2007, The American Veterinary Medical Association (AVMA) has recently been made aware of several complaints from pet owners and veterinarians that multiple brands of jerky treats manufactured in China have been making pets sick. Signs of illness have included vomiting, diarrhea, and lethargy. To our knowledge, no deaths have been reported. The AVMA posted an alert on its Web site on Sep 13 to inform its members and the public about what was known. On Sep 14 the American College of Veterinary Internal Medicine (ACVIM) issued a statement saying it also has become aware of an unusual number of dogs presenting similar signs and abnormal test results associated with consumption of some jerky treats. The Food and Drug Administration (FDA) is currently testing several products to see if a contaminant can be found. So far, they have ruled out melamine, one of the chemicals that led to the massive pet food recall this spring, but have yet to identify anything that might be making pets sick. While a list of brand/product names of affected treats is not yet available, the AVMA has learned that all complaints have involved jerky treats from China. We recommend that pet owners use their best judgment in this matter. Suspected cases should be reported to the FDA. To find the number for the FDA district office consumer complaint coordinator in your region, visit http://www.fda.gov/opacom/backgrounders/complain.html. The AVMA is monitoring the situation and will provide updated information on their Web site (http://www.avma.org) as soon as it becomes available. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS:

ANTHRAX, HUMAN, BOVINE (Russia): 9 Sept 2007, Anthrax has been diagnosed in an inhabitant of the Tunkinsky district in Buryatia. The affected person, who has been hospitalized, participated at the end of August in the slaughter of cow which, apparently, was infected by anthrax. The directorate of the Ministry of extreme situations in the Republic of Buryatia informed that quarantine measures have been applied in the affected district. This includes disinfection check-points on the Federal highway Ulan-Ude - Mondy, where vehicles undergo sanitary procedures. A total of 500 doses of a human anthrax vaccine and 10 000 doses of animal vaccine have been delivered in the district. The villages Kyren and Khuzhyr are considered to be in a high risk area, but so far no symptoms of disease have been recorded in animals. More than 130 persons from the high risk area, or those who might have been exposed to the slaughtered sick animal, have been contacted, medically checked and found healthy. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

TULAREMIA (Russia): 10 Sep 2007, In Berezov district (Khanti-Mansiysky autonomous region), the number of patients with tularemia has increased to 23 persons. It is reported that, all infected persons, among them 3 children, have been hospitalized. It is thought that rodents are the source of infection. Rodents' burrows were flooded because of high level of water; therefore the animals had to search for new habitation close to human settlements. Insects may have played a

significant role in transmission of infection. (Tularemia is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

EBOLA HEMORRHAGIC FEVER (Democratic Republic of Congo): 12 Sep 2007, The Ministry of Health (MoH) of the Democratic Republic of the Congo (DRC) has confirmed an outbreak of Ebola hemorrhagic fever, in the province of Kasai Occidental. Laboratory analysis undertaken at the Centre International de Recherches Medicales de Franceville (CIRMF) in Gabon, and at the US Centers for Disease Control and Prevention (CDC) in Atlanta, has confirmed the presence of Ebola virus in samples taken from cases associated with the outbreak. Laboratory tests conducted by Institut National de Recherches Biologiques (INRB) in Kinshasa on urine and blood samples collected from suspected cases, have also confirmed the presence of Shigella dysentery type 1, further complicating operations while case definitions and clinical descriptions, particularly in response to rehydration and antibiotic treatment, support a possible concurrent outbreak of another etiology. As of Sep 11, the WHO is aware of 372 cases and 166 deaths associated with the ongoing event in the province. Additional samples have been taken for further laboratory analysis. The WHO Country Office, Regional Office and Headquarters are supporting the MoH in Kinshasa and in the field at the location of the outbreak. Additional staff, outbreak response equipment and supplies, including Personal Protective Equipment (PPE) are being sent to the area. A enhanced team of national and international experts is being mobilized to implement control strategies for Ebola hemorrhagic fever and to support outbreak field response in the province. Medecins Sans Frontieres (Belgium) has deployed clinicians, water and sanitation experts and logisticians to the area and has established appropriate isolation facilities. A request for additional support has been sent to the Global Outbreak Alert and Response Network in the areas of clinical case management and infection control, surveillance and field epidemiology, risk communications and social mobilization, and outbreak response logistics. The WHO is also working with the INRB, CIRMF, CDC, Atlanta and the Public Health Agency of Canada laboratory in Winnipeg to ensure the MoH is provided with comprehensive laboratory support in the control and investigation of the outbreak. The WHO advises that there is no indication of the need for any restrictions on travel or trade with the Democratic Republic of the Congo. (Viral hemorrhagic fevers are listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

BRUCELLOSIS, HUMAN, ANIMALS (Bulgaria): 13 Sep 2007, Bulgaria's national veterinary service confirmed on Sep 12, a second outbreak of the rare animal disease brucellosis in the south of the country. The service said in a statement that 36 goats out of a herd of 70 had tested positive for the infection in the southern town of Harmanli. The infection in Harmanli spread from a first outbreak in August 2007 in the nearby village of Valche pole, where dozens of goats and sheep were found to be infected after a woman fell ill with brucellosis-like symptoms. Later, 3 other people also tested positive for the disease, which is often difficult to diagnose as its initial symptoms, which include weakness, fever, sweating, headaches, and joint pains, resemble influenza. Humans can contract brucellosis from contact with sick sheep and goats or by consuming infected meat, milk, or cheese. The disease, which is very rare in Bulgaria, can be fatal for humans but cannot be transferred from one person to another. (Brucellosis is listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

ANTHRAX, BISON (Canada): 13 Sep 2007, An outbreak of anthrax in the Municipal District of Fairview has Peace region livestock producers wondering what they can do to avoid similar incidents on their own farms - the answer to which is, very little. The Canadian Food Inspection Agency (CFIA) has been monitoring the situation on a bison farm south of Bluesky since Aug 23, where the deadly bacteria have killed 52 of the animals to date. The owner of the farm adamantly refused to comment on the situation, directing all questions to the CFIA. Confidentiality regulations also prevent the CFIA from commenting on specific cases, but a media representative did confirm that a case of anthrax was reported in the Municipal District of Fairview and that 52 bison have died as a result. Anthrax spores lay inactive in the soil after the death of an infected animal. There is a good chance that the anthrax we're seeing today is a result of the bison that once roamed freely in this area hundreds of years ago, said Dr. Lloyd Keddie of the North Peace Animal Hospital in Fairview. When the spores are ingested, inhaled, or come into contact with an open wound, the bacteria become active and can kill the animal in less than 2 days, depending on the strain of anthrax involved, he said. Ingestion is the most common means of transmission in livestock, and occurs when soil is disturbed or overturned, exposing the bacteria to the animals, he said. If a producer suspects anthrax, the CFIA stresses that they do not handle the carcasses at all. They are advised to contact their veterinarian immediately. The veterinarian will evaluate the scene and contact the CFIA if anthrax is involved. All cases of anthrax must be reported to the CFIA under law. The situation on the affected farm is ongoing, and the remaining bison will be quarantined for 21 days following the last death of an animal, or 21 days after the vaccine is administered, whichever is longer, according to CFIA regulations. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

SHIGELLOSIS, THAI BABY CORN (Australia): 13 Sep 2007, An outbreak of shigellosis was recently reported in Denmark associated with the consumption of imported baby corn from Thailand. We report a similar outbreak of shigellosis in Queensland, Australia that is possibly linked to the Danish outbreak through a common source in Thailand. Queensland Health has investigated 11 laboratory-confirmed cases of Shigella sonnei (biotype g) with most cases having reported either consuming imported baby corn from Thailand or eating at a venue where imported baby corn was commonly served. These cases included 2 from another Australian State, Victoria, who had traveled to Queensland. 4 cases were part of a larger outbreak among a film production crew where there were a further 43 probable cases (with symptoms including acute diarrhea with or without vomiting, stomach cramps, and fever between Aug 9-14, although it was not possible to conduct a cohort study. Another 2 cases were infected while hospitalized and a further 2 cases ate at a common holiday resort. The dates of onset of illness among the 11 laboratory-confirmed cases were from Aug 9-27. Results of pulsed field gel electrophoresis testing of the human isolates from Queensland show a profile that is

indistinguishable from that of human isolates from the outbreak in Denmark using the enzyme XbaI and the same running conditions as Denmark. The traceback investigation to date shows that 8 of the 11 cases may have eaten baby corn that was part of a very small consignment imported in late July 2007 by a single wholesaler in Queensland from an agent in Thailand. This Thai agent appears to be different from the Thai business that exported baby corn to Denmark, but the producer of the baby corn may still be the same, which remains to be investigated. Microbiological testing of baby corn from current batches is currently underway, although there was no leftover baby corn from the original consignment for testing. Australia is attempting to trace the source of the baby corn with the assistance of Thai authorities. Onset date of illness for the last reported case was Aug 27, and therefore no product recall has been initiated. Enhanced case surveillance has commenced to enable a more rapid response to the investigation of cases. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

PLAGUE, FATAL, SUSPECTED (Uganda): 14 Sep 2007, Plague continues to cause anxiety in Aruu town. Medical reports from Aruu health centers indicate that at least 20 people have been infected by suspected plague. The report says 5 people have been killed as a result of the outbreak. The commissioner for Community Health, Dr Sam Okware said, "Plague is endemic in the region. It happens at this time of the year, especially when the rains start falling in June. It is caused by rats that cross from DR Congo." Arua DDHS (Divisional Director of Health Services) Patrick Anguzu said on Sep 12 that a health team from Arua has set up emergency plans to deal with suspected cases. The infected area, 'Kampala', is a popular market that attracts traders from West Nile and Congo for cross-border trade. "Yes, there is that scare because it can spread faster in our places. So our medical personnel have to be ready for any suspected cases that may spill off to our area. That area (Kampala) is not far from us in Arua," Dr Anguzu said. (Plague is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

CHOLERA (Iraq): 14 Sep 2007, Between Aug 23 and Sep 10, the cumulative number of cases of acute watery diarrhea reported from Sulaymaniyah province stands at 6142 including 9 deaths (case fatality rate, CFR: 0.14 percent). Of these reported cases, Vibrio cholerae has been laboratory confirmed in 392 stool specimens. The first index case of cholera, confirmed by laboratory test, was reported from Kirkuk province on Aug 14. The outbreak continues to spread into Erbil province, where, between Sep 1-10, 11 641 cases of diarrheal disease with no deaths were reported. The Government of Iraq has mobilized a multi-sectoral response to the outbreak. A high-level National Committee on Cholera Preparedness and Outbreak Response has been established. The health authorities of affected provinces are implementing public health control measures, including regular water quality testing, to contain the outbreak and to mitigate its effect on the population. WHO, along with other UN agencies, the International Committee of the Red Cross (ICRC), and international NGOs, continue to support the Ministry of Health and local health authorities in ongoing response operations. WHO is procuring emergency supplies such as chlorine tablets, rapid diagnostic tests, and interagency diarrhoeal diseases kits, as well as disseminating technical guidelines on case management. Social mobilization campaigns are being implemented with the participation of religious and community leaders. In controlling the spread of cholera, the WHO does not recommend any special restrictions to travel or trade to or from affected areas. (Water Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

*Cases and outbreaks will be cited for suspect level with regards to suspicion of BT threat. Therefore, cases and outbreaks will be categorized as "Determined BT", "Suspect" or "Non-suspect".

OTHER RESOURCES AND ARTICLES OF INTEREST:

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://bioterrorism.dhmh.state.md.us/

****

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information is a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

Questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

Heather N. Brown, MPH
Epidemiologist
Office of Preparedness and Response
Maryland Department of Health & Mental Hygiene

201 W. Preston Street, 3rd Floor
Baltimore, MD 21201
Office: 410-767-6745
Fax: 410-333-5000
Email: HBrown@dhmh.state.md.us